

**WHAT IS CLAIMED IS:**

1. Use of a dietary fiber or mixture of dietary fibers for manufacture of a composition for prevention, inhibition and/or treatment of systemic infections in humans and in vertebrates caused by pathogenic bacteria.

2. Use according to Claim 1, wherein the composition is selected from the group consisting of a pharmaceutical composition, a functional food, and a functional feed.

3. Use according to Claim 1, wherein the composition is a form which is suitable for administration selected from the group consisting of oral administration, tube feeding, and rectal administration.

4. Use according to Claim 1, wherein the dietary fiber is selected from the group consisting of lignin, cellulose, hemicellulose, pectin, gums, arabic gum, carrageenan, waxes, resistant oligosaccharides, oligofructose, resistant polysaccharides, resistant starch and fructan.

5. Use according to Claim 4, wherein the fiber is a fructan selected from the group consisting of levan, inulin and oligofructose.

6. Use according to Claim 5, wherein the fiber is chicory inulin with an average degree of polymerization ( $\overline{DP}$ ) of at least 20.

7. Use according to Claim 6, wherein the fiber is chicory inulin with an average degree of polymerization ( $\overline{DP}$ ) of at least 25.

8. Method for prevention, inhibition and/or treatment of systemic infections in humans or vertebrates caused by pathogenic bacteria comprising

administering to said humans or vertebrates a composition containing an effective amount of a dietary fiber or a mixture of dietary fibers.

9. Method according to Claim 8, wherein the composition is administered orally, through tube feeding or rectally.

10. Method according to Claim 8, wherein the composition is selected from the group consisting of a pharmaceutical composition, a functional food, and a functional feed.

11. Method according to Claim 8, wherein the dietary fiber is selected from the group consisting of lignin, cellulose, hemicellulose, pectin, gums, arabic gum, carrageenan, waxes, resistant oligosaccharides, oligofructose, resistant polysaccharides, resistant starch and fructan.

12. Method according to Claim 11, wherein the fiber is a fructan selected from the group consisting of levan, inulin and oligofructose.

13. Method according to Claim 12, wherein the fiber is chicory inulin with an average degree of polymerization ( $\overline{DP}$ ) of at least 20.

14. Method according to Claim 12, wherein the fiber is chicory inulin with an average degree of polymerization ( $\overline{DP}$ ) of at least 25.